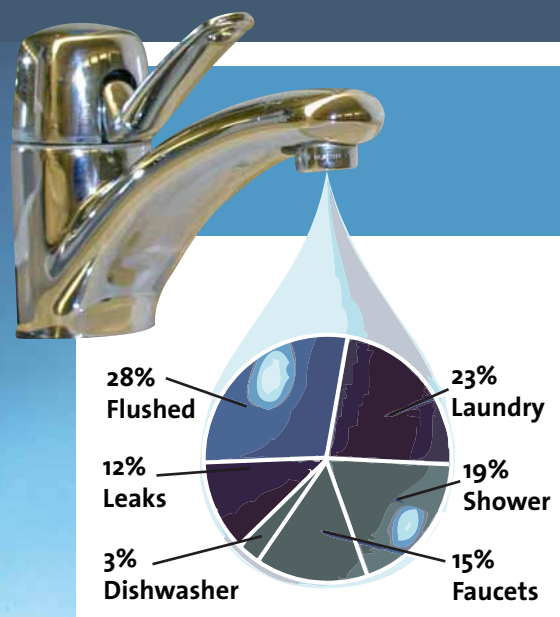
Water Quality Report

FOR BLOOMINGTON, MN • 2005 TEST RESULTS

CITY OF BLOOMINGTON MINNESOTA

June 2006

Inside



A drinkable water drop dissected: Daily water usage inside a typical American home

Think Conservation

Every water drop is a precious resource

Drinkable water is a limited resource. Nearly 97 percent of the world's water is salty or otherwise undrinkable. Another 2 percent is locked in ice caps and glaciers. That leaves just 1 percent for humanity's needs. Drinkable water is precious.

Generally, Americans drink less than 1 percent of the treated water produced by water utilities. The bulk goes on lawns, in washing machines, and down toilets and drains. Typically, at least 50 percent, or 30 gallons, of water consumed by households each day is used for outside tasks such as landscaping. Inside, bathroom tasks claim the majority of the water used in a typical American home. *See the chart to the left.*

What can you do to help? Start small. Did you know that a slow drip from the kitchen faucet can waste a lot of water? Fifteen drips per minute adds up to almost three gallons of drinkable water wasted per day, which is 65 gallons per month and 788 gallons per year! Fix that drip and help conserve water.

Ensuring your safety

Bloomington's water surpassed all requirements

At the City of Bloomington, our goal is to provide you with high quality, safe, reliable drinking water that meets every federal and state water quality requirement. This report contains information about the sources, treatment process and history of our water system. On page four, we provide a summary of the results of water quality monitoring on Bloomington's water sources performed from January 1 to December 31, 2005, by the Minnesota Department of Health, the City of Minneapolis and our own laboratories. We have also tried to answer some of the most common questions that people have about our water. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

Get involved

The Public Works Department works hard to ensure that your water meets all federal, state and local guidelines. Your input on water quality issues is welcome. For information, contact Water Quality Supervisor Jon Eaton at 952-563-4501.

If you have questions about your water, or if we can be of service in any way, please give us a call or visit the City's Web site.

Water Plant (24 hours a day)
952-563-4905
TTY (8 a.m. to 4:30 p.m., M-F)
952-563-8740
City Web site:
www.ci.bloomington.mn.us,
keywords: Water plant.

Spanish

Información importante. Si no la entiende, haga que alguien se la traduzca ahora.

Hmong

Nov yog ntaub ntawv tseem ceeb. Yog koy tsi to taub, nrhiav neeg pab txhais rau koh kom sai sai.

Award winning facilities at your service

New Minneapolis Filtration Plant receives top honors

Since Bloomington completed the remodeling and expansion of the Sam Hobbs Water Treatment Plant in 2002, we've provided about 78 percent of our customers' needs. The remaining water, which equaled 1.01 billion gallons in 2005, is supplied from the city of Minneapolis.

Minneapolis has been upgrading its facilities to meet drinking water quality standards set by new federal laws and regulations. Their efforts have not gone unnoticed. Just seven months after going on line, the Columbia Heights facility won a 2006 Global Water Award for "Water/Wastewater Project of the Year," receiving higher marks than projects in California, Wisconsin, Egypt, Italy and Hong Kong. The award cites the plant's ability to remove pathogens, pollution and other potential hazards from Mississippi River water.

Using ultra-filtration, particles as small as viruses get filtered out of the water. Chlorine is also added to kill harmful pathogens that can cause typhoid and other diseases.

The new ultra-filtration plant is the largest in the Western Hemisphere and the third-largest in the world. About 70 million gallons of water will be filtered each day. Only two other plants, in Singapore and Kuwait, filter more water using this process.

"We are just doing what is best for our citizens and customers," said Minneapolis project manager Dale Folen. "This award recognizes the vision of Minneapolis' leadership and the hard work of individuals and companies. We are all working toward providing the best-quality water possible."

The original Columbia Heights plant, built between 1913 and 1918, is being phased out. Once all production moves to the new plant, the older facility will be maintained as a backup system.

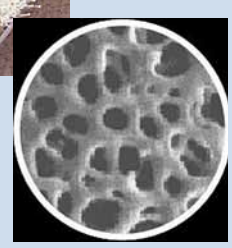
Completion of the new plant ends the first phase of a program to replace all of Minneapolis' water filtration plants. A second ultra-filtration plant will replace a facility in Fridley that was built in 1925. The initial selection of equipment has already begun. When that facility become operational in 2011, Minneapolis could become the world's largest city to have all of its water, close to 165 million gallons each day, treated through ultra-filtration.

Minneapolis' new ultra-filtration plant at Columbia Heights uses a state-of-the-art technology to provide ultra-clean water to Bloomington.

Protecting drinking water

Public safety has been at the forefront since the September 11 attacks. Access to all water facilities has been strictly controlled. To continue education and peer-to-peer training, Minneapolis has added a classroom environment to teach the public about the treatment process without allowing access to actual treatment areas.

This cross-section shows the thousands of hollow fibers packed inside each vessel.



Like a sieve, tiny holes in each fiber's walls trap materials and let the water through.

Ultra-filtration plant fun facts

Ultra-filtration uses millions of hollow fibers to take particulate matter out of water. Each of the plant's 40 ultra-filtration units contains 28 vessels and each vessel contains 9,600 fibers. *See left.* This means more than 43 million fibers clean the water coming from this facility.

Altogether, these fibers create a surface area of approximately 1.7 million square feet. If put end-to-end, these fibers would stretch more than 40,000 miles, or about 1.6 times the circumference of the earth at the equator.